Apprentice Survey

Summary Report

July 2001

NOVA SCOTIA
Department of Education
Provincial Apprenticeship Board

Acknowledgment

The 'Apprentice Survey' initiative was the second research activity undertaken by the Provincial Apprenticeship Board over the past two years. Survey design was a rather simple matter given the assistance and permission to use survey questions from a 1988 study by Dr. John Walsh of the University of Guelph. The Provincial Apprenticeship Board, through its Linkages and Industry subcommittee, coordinated delivery. Board staff was the means by which all data was entered into the statistics package, SPSS. The survey would not have been possible without the permission and subsequent assistance provided by Department Heads of Nova Scotia Community College and University College of Cape Breton. To the apprentices and the above mentioned, a great deal of thanks.

Peter Greer
Chair
Provincial Apprenticeship Board

Joe Rudderham
Administrator
Provincial Apprenticeship Board

Executive Summary

Actual and perceived shortages in the skilled trades sector have been in the forefront of apprenticeship discussions. Forces driving the discussion/debate include the state of the Nova Scotia economy and the demographics of those participating in trades. In addition to many other factors, the lack of accurate and usable labour market information is also influencing the debate.

The Nova Scotia Provincial Apprenticeship Board (PAB) is one of many stakeholder organizations keenly interested in addressing skills shortages. The PAB serves in an advisory capacity to the Minister of Education and has the ability to engage in apprenticeship research. One approach the Board has taken to provide some insight into the shortages and/or trends was to determine perceptions of students attending high schools in the province. This was accomplished through a Youth Decision questionnaire administered in 15 high schools across the province. Over 1200 students participated and the results provided useful information that will assist the Board and its industry partners in moving Apprenticeship forward.

To provide further understanding of factors influencing Apprenticeship, the PAB designed and delivered an Apprentice Survey during the period beginning January 1, 2001 to April 12, 2001. The purpose of the survey was to provide an initial assessment of how apprentices perceived their training and work experience. The survey was conducted with the assistance of Nova Scotia Community College and the University College of Cape Breton.

Out of a possible 848 indentured apprentices (821 males / 27 females) who attended training during the implementation period, 307 surveys were completed (37.2%). It is important to note that only those apprentices who were scheduled to attend training and who actually attended, participated in the survey.

Analysis of the survey data resulted in the following:

> It appears information/advice from family members was the most helpful source when deciding what to do when the future apprentices left high school. Second was the advice of friends followed by teachers/guidance counselors.
>
> Potential income and secure future had the greatest influence in the decision to enter the Apprenticeship Program.
>
> Apprentices appear to have relatively positive perceptions of skilled trades and they believe their trade pays well; is interesting and; is better than an office job.
>
> It appears apprentices are reasonably pleased with the their Apprenticeship Program and the assistance received from the Apprenticeship Training Division. There seems to be a significant number of apprentices who consider training block or course length and teaching materials inadequate.

More than 50% of apprentices indicated skilled trade information was not available, knew little about apprenticeship and, did not know what was needed to become an apprentice while in high school.

It appears apprentice training was supported by employers and apprentices had relatively easy access to supervising journeypersons.

It appears apprentices would encourage youth to become apprentices but when responding about their own children, apprentices were not sure.

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Background

The Provincial Apprenticeship Board (PAB) is responsible for providing advice to the Minister of Education on matters concerning apprenticeship training and is considered to be a fundamental link between government and industry. Specifically, the Board is responsible for recommending the designation of new trades in Nova Scotia and plays a key role in promoting and educating the public about apprenticeship.

In the Fall of 1999, the PAB adopted a number of initiatives which were designed to assist the Board in fulfilling its mandate. One of the identified initiatives was to determine apprenticeship based knowledge of high school students across the province. To complete a survey of high school students, the Board delegated the initiative to the Marketing and Communications subcommittee. By the middle of Fall 1999, the subcommittee had decided on a modified version of a survey implemented by the University of Guelph in 1989. The Guelph study surveyed students, parents, apprentices, journeypersons and employers. It was felt the scope of the Guelph study was too large but the student component was thought to fit well with the Board's objective. With a survey in hand, Board staff contacted randomly selected schools in each School Board jurisdiction and successfully had 1276 completed surveys.

Having gained a greater understanding of student perceptions in the province's high schools, the Board decided the next step would be to determine how the registered apprentices perceived their training and work experience. Survey questions used in the Guelph study were augmented with additional questions resulting in the Apprentice Survey questionnaire (attached).

Methodology

The survey was delivered through nine Department Heads at Nova Scotia Community College Campuses and University College of Cape Breton. Each Department representative was asked to administer the survey to indentured apprentices attending apprenticeship training between January 1 and April 12, 2001. This three to four month period was chosen due to it being the time of the year with the greatest number of apprentices attending training. Completed surveys were returned throughout, and just following, the April 12 cut-off to the Department of Education where data was inputted over a three week period using SPSS version 9. SPSS allowed for the data to be summarized and analyzed with relative ease. All tables and charts in this document were generated using SPSS printouts.

Survey Results

Of the 848 apprentices who attended training during the survey period, 36.2% (307) responded. Of the 307 respondents, 37.2% were apprentices attending training at the Marconi Campus, 33.9% were from the Information Technology (IT) Campus and 17.4% were from UCCB *(Table 1)*. 290 of the respondents were males and 16 were females *(Table 2)*. Fifteen trades were identified by the respondents (*Table 3*). Of the 15 trades, Construction Electrician was represented by 18.7% followed by Carpenter at 15.3% and Boilermaker at 13.0%.

Table 1: *Breakdown of respondents by training site campus*

Campus	#	%	*Campus*	#	%
Akerley	2	0.7	**Marconi**	113	37.2
Burridge	10	3.3	**Pictou**	18	5.9
Halifax	2	0.7	**Strait Area**	1	0.3
IT	103	33.9	**UCCB**	53	17.4
Lunenburg	2	0.7	***Total***	**304**	**100.0**

Table 2: *Breakdown of respondents by sex*

Sex	#	%
Male	290	94.8
Female	16	5.2
Total	**306**	**100.0**

Table 3: *Breakdown of respondents by Apprenticeship Trade*

Trade Name	*Male*	*Female*	%	*Trade Name*	*Male*	*Female*	%
Automotive Service Technician	6		2.0	**Ironworker**	18		6.0
Boilermaker	36	3	13.0	**Motor Vehicle Body Repairer**	5		1.7
Carpenter	44	2	15.3	**Motor Vehicle Repair**	10		3.3
Const. Electrician	55	1	18.7	**Plumber**	5		1.7
Cook	21	10	10.3	**Steamfitter/Pipefitter**	27		9.0
Heavy Duty Equipment Mechanic	3		1.0	**Truck and Transport Mechanic**	23		7.7
Industrial Electrician	3		1.0	**Welder**	10		3.3
Industrial Mechanic	18		6.0	***TOTAL***	**284**	**16**	100.0

The average age of all who responded to the age question was 28.2 years. The youngest was 18 years and the oldest 58 years. The most common age was 22 years and more came from the age grouping of 23 - 27 than any other grouping (***Table 4***).

Table 4
Breakdown of respondents by age

Age Group	**#**	**%**
18 - 22	47	20.1
23 - 27	75	32.1
28 - 32	63	26.9
33 - 37	25	10.7
38 - 42	19	8.1
43 and over	5	2.1
Total	**234**	**100.0**

The average number of years in Apprenticeship for all who responded to the question was 3.9 years. Close to one-third (29.3%) reported being in their second year followed by 16.9% reporting fourth year. The years in Apprenticeship responses ranged from 1 to 16 years (***Table 5***).

Table 5
Breakdown of respondents by years in Apprenticeship

Years in Apprenticeship	**#**	**%**
1	34	11.9
2	90	31.6
3	33	11.6
4	52	18.2
5	24	8.4
6	15	5.3
7 to 10	23	8.1
Greater than 10	14	4.9
Total	**285**	**100.0**

When asked the question, "In the first year after you left high school, what did you do?", more than one-third (35%) of the respondents indicated they went to community college followed by 29% who indicated they worked in a non-skilled job. The question response receiving the least number of responses (11.3%) was 'Went to university' (***Table 6***).

Table 6

What Apprentices did after High School

Responses	**#**	**%**
Worked in a non-skilled trade job	87	29
Became an apprentice	37	12.3
Went to university	34	11.3
Went to community college	105	35
None of the above	37	12.3
Total	**300**	**100.0**

When asked "What do you think your parents wanted you to do when you left high school?", 33.9% of the respondents thought their parents wanted them to 'get a job' followed by 'go to university' at 21.6% and 'go to community college' ant 17.1% (***Table 7***).

Table 7

What parents wanted respondents to do after High School

Responses	**#**	**%**
Go to university	63	21.6
Go to community college	50	17.1
Become an apprentice	16	5.5
Get a job	99	33.9
I am not sure	44	15.1
Other	20	6.8
Total	**292**	**100.0**

It appears that information/advice from family members was the most helpful source (30.9%) when deciding what to do when the respondents left high school. Second on the list of choices was friends (14.3%) followed by teachers and guidance counselors at 12.4%. Just over thirty percent (30.3%) of the respondents indicated 'other' as their response (***Table 8***).

Table 8

What information and/or advice was helpful

Responses	**#**	**%**
Books and college calendars	11	3.8
Friends	44	14.3
Family members	95	30.9
Teachers and school counsellors	38	12.4
Television, radio and magazines	5	1.6
Other	93	30.3
Total	**286**	**100.0**

When asked, "What was the main reason you entered the apprenticeship program?", 'potential income' (30.5%) and 'secure future' (29.8) were the responses receiving the greatest percentages (***Table 9***).

Table 9

Main reason for entering Apprenticeship

Reason	**#**	**%**
Challenging Work	43	15.2
Potential Income	86	30.5
Family Advice	17	6
Secure Future	84	29.8
School Counseling	2	0.7
Dissatisfaction With Previous Work	28	9.9
None Of The Above	22	7.8
Total	**282**	**100.0**

Tables 10 through 14 present the results of the perception statements broken down into five categories: 1) Skilled Trade Perceptions; 2) Apprenticeship Training/Program perceptions; 3) High School Perceptions; 4) Employer and EI Perceptions and; 5) Encouragement Perceptions. To further represent the data, charts have been provided.

Skilled Trade Perceptions

Like the student respondents of the Youth Decision Survey, apprentices appear to have relatively positive perceptions of skilled trades. In general, apprentices believe their trade pays well, is interesting and is better than an office job (***Table 10***).

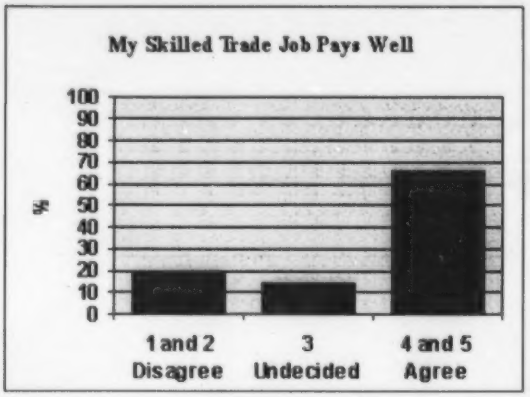
Table 10

1 = Strongly Disagree
3 = Undecided
5 = Strongly Agree

Skilled Trade Perceptions

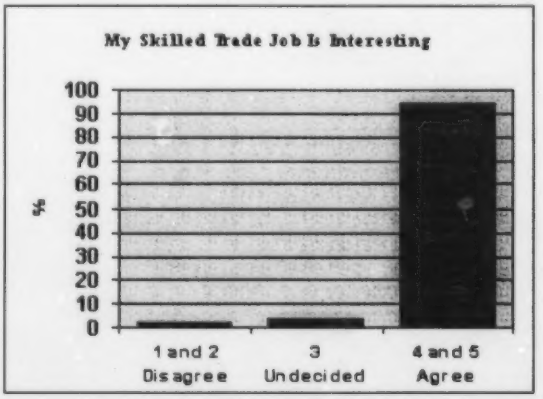
Statements	**1** (%)	**2** (%)	**3** (%)	**4** (%)	**5** (%)
People don't become apprentices because wages are too low	7.6	36.8	**20.5**	27.8	7.3
A skilled trade was my first job choice	4.7	24.9	**12.6**	42.2	15.6
My skilled trade pays well	5.6	14.8	**13.8**	53.9	11.8
My skilled trade job is dirty	2.3	24.3	**10.0**	46.7	16.7
My skilled trade job is interesting	0.3	1.6	**3.6**	71.1	23.3
Skilled trades people often start their own businesses	1.7	13.2	**40.6**	41.3	3.3
People think it unusual that I became an apprentice	9.5	54.9	**18.6**	13.1	3.9
New technology will make my skilled trade less important	21.5	56.1	**11.2**	9.2	2.0
Skilled Trade jobs are important in industry	1.0	0.7	**2.6**	52.6	43.1
People in Skilled Trades are satisfied with their jobs	1.7	11.3	**38.7**	43.4	5.0
Women are as capable as men working in my job	5.6	13.8	**21.4**	45.7	13.5
In my trade, people are often unemployed	5.0	34.0	**24.1**	31.7	5.3
There is a big demand for people in my trade	1.0	12.5	**27.3**	47.4	11.8
People in my trade rarely get promoted	4.3	43.6	**29.8**	20.3	2.0
An office job is better than a Skilled Trade job	27.1	43.6	**20.8**	6.9	1.7

Chart 1



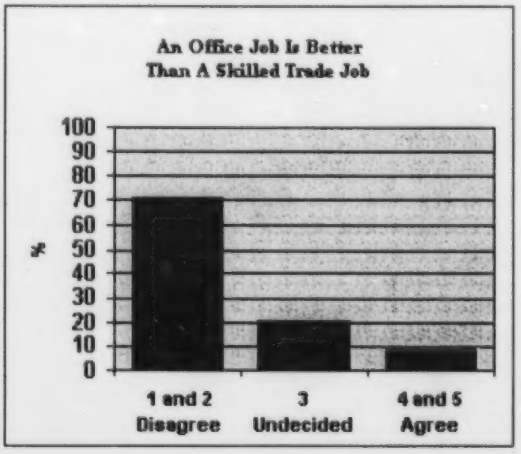
65.7% of the apprentices either agreed or strongly agreed to the statement "My skilled trade job pays well." 20.4% disagreed or strongly disagreed and 13.8% were undecided.

Chart 2



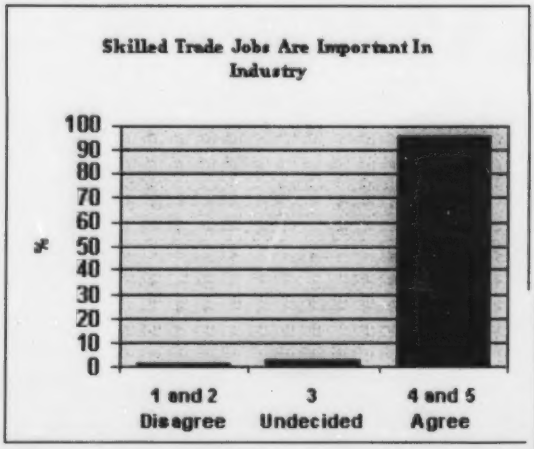
94.4% of the apprentices either agreed or strongly agreed to the statement "My skilled trade job is interesting." 2% disagreed or strongly disagreed and 3.6% were undecided.

Chart 3



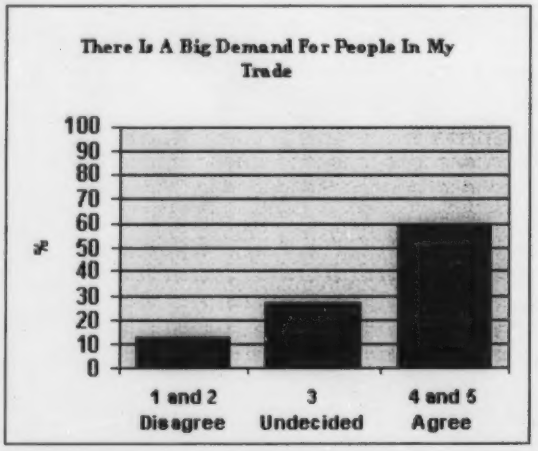
8.6% of the apprentices either agreed or strongly agreed to the statement "An office job is better than a skilled trade job." 70.8% disagreed or strongly disagreed and 20.8% were undecided.

Chart 4



95.7% of the apprentices either agreed or strongly agreed to the statement "Skilled trade jobs are important in industry." 1.7% disagreed or strongly disagreed and 2.6% were undecided.

Chart 5



59.2% of the apprentices either agreed or strongly agreed to the statement "There is big demand for people in my trade." 13.5% disagreed or strongly disagreed and 27.3% were undecided.

Apprenticeship Training / Program Perceptions

It appears apprentices are reasonably pleased with the their Apprenticeship Program and the assistance received from the Apprenticeship Training Division (see Charts 6 and 7). In two of the statements, "On average, each training block or course was the right length" and " Course or block teaching material was up-to-date", more than 25% of the respondents disagreed or strongly disagreed (***Table 11***).

Table 11

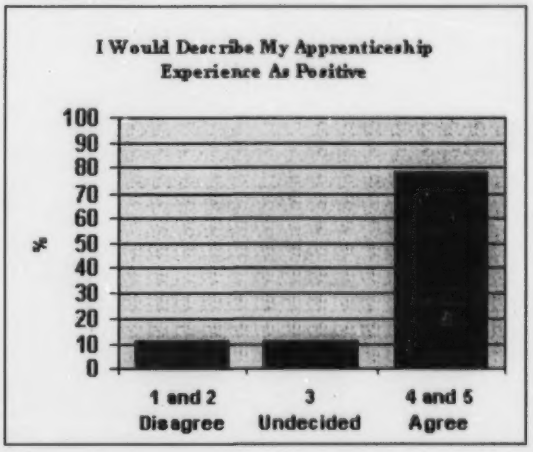
1 = Strongly Disagree
3 = Undecided
5 = Strongly Agree

Apprenticeship Training / Program Perceptions

Statements	**1 (%)**	**2 (%)**	**3 (%)**	**4 (%)**	**5 (%)**
My apprenticeship program was the right length	4.6	17.2	**16.2**	56.3	5.6
I would describe my apprenticeship experience as positive	1.7	9.0	**11.0**	59.5	18.9
I did not enjoy my apprenticeship program	15.8	51.8	**21.1**	8.6	2.6

Statements	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
My apprenticeship training (blocks or courses) prepared me for work	6.2	13.4	**20.3**	51.5	8.5
On average, each training block or course was the right length	9.3	17.6	**23.9**	46.2	3.0
Course or block teaching material was up-to-date	12.2	18.8	**17.4**	45.1	6.6
I am aware of apprenticeship training on the Internet	6.6	26.0	**10.2**	52.3	4.9
Training & Certification Officers were helpful in my apprenticeship program	7.3	10.0	**18.9**	52.8	11.0
The Apprenticeship and Training Division was helpful when I had questions	5.6	10.5	**22.0**	53.0	8.9
Apprenticeship related paper work was easy to fill out	1.3	4.9	**15.8**	73.4	4.6
I am familiar with the role the Provincial Apprenticeship Board plays	7.2	21.6	**25.9**	44.3	1.0

Chart 6



63.8% of the apprentices either agreed or strongly agreed to the statement "Training and Certification Officers were helpful during my Apprenticeship." 17.3% disagreed or strongly disagreed and 18.9% were undecided.

78.3% of the apprentices either agreed or strongly agreed to the statement "I would describe my apprenticeship experience as positive." 10.7% disagreed or strongly disagreed and 11.0% were undecided.

Chart 7

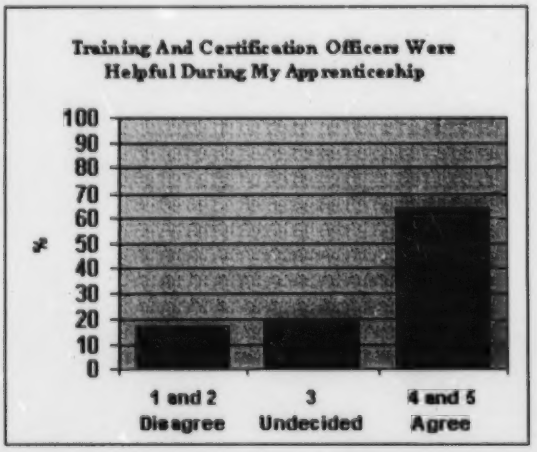
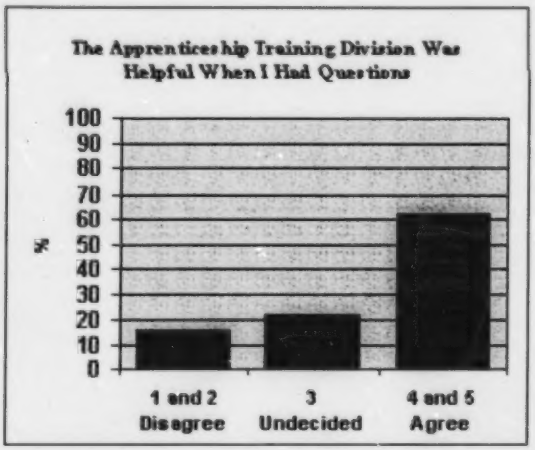
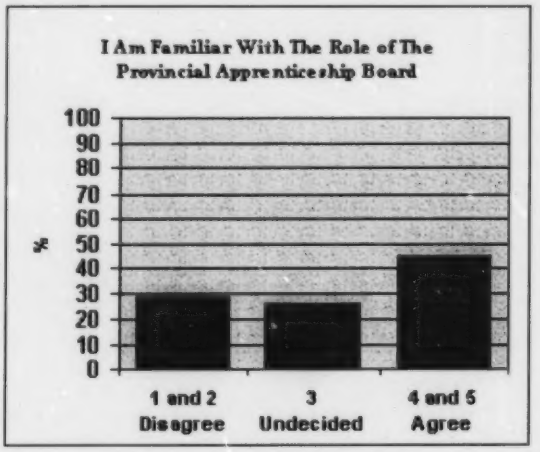


Chart 8



61.9% of the apprentices either agreed or strongly agreed to the statement "The Apprenticeship Training Division was helpful when I had questions." 16.1% disagreed or strongly disagreed and 22.0% were undecided.

Chart 9



45.3% of the apprentices either agreed or strongly agreed to the statement "I am familiar with the role of the Provincial Apprenticeship Board." 28.8% disagreed or strongly disagreed and 25.9% were undecided.

High School Perceptions

When asked to respond to statements concerning apprenticeship and high school, greater than 50% indicated skilled trade information was not available, knew little about apprenticeship and did not know what was needed to become an apprentice. Close to 75% of the respondents disagreed with the statement, "Good students do not go into skilled trades", and 56% agreed that skilled trade jobs require better than average education. (***Table 12***)

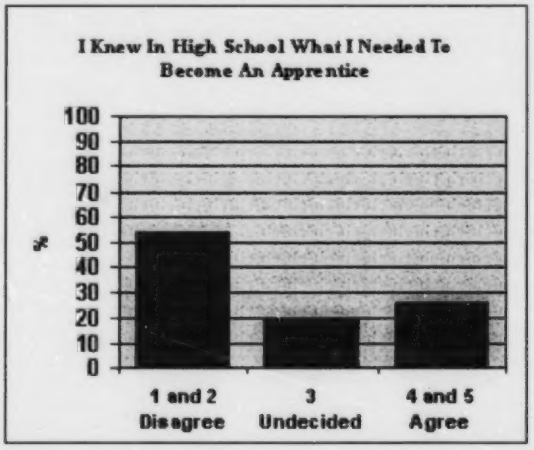
Table 12

1 = Strongly Disagree
3 = Undecided
5 = Strongly Agree

High School Perceptions

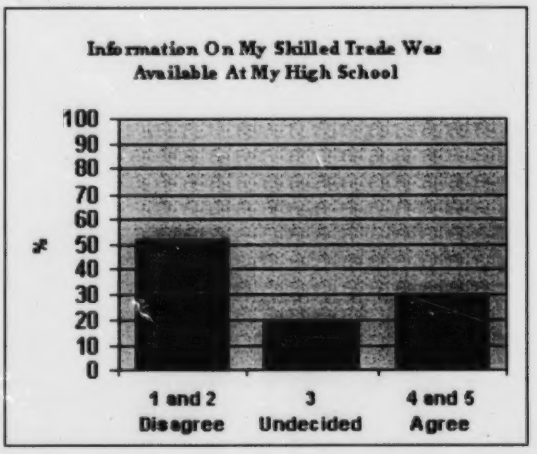
Statements	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
I knew in high school what I needed to become an apprentice	14.6	39.7	**19.5**	23.8	2.3
Information on my skilled trade was available at my high school	15.7	36.4	**18.0**	27.5	2.3
Skilled Trade jobs require better than average education	1.7	23.4	**18.8**	50.5	5.6
I knew little about apprenticeship when I was in High School	3.6	17.2	**10.6**	55.3	13.2
Good students do not go into Skilled Trades	26.8	48.2	**13.0**	11.0	1.0

Chart 10



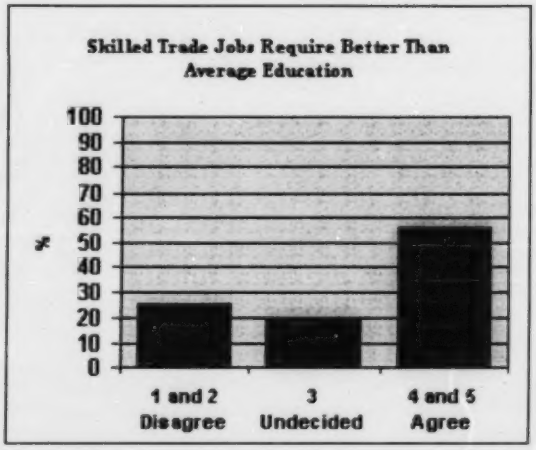
26.1% of the apprentices either agreed or strongly agreed to the statement "I knew in high school what I needed to become an apprentice." 54.4% disagreed or strongly disagreed and 19.5% were undecided.

Chart 11



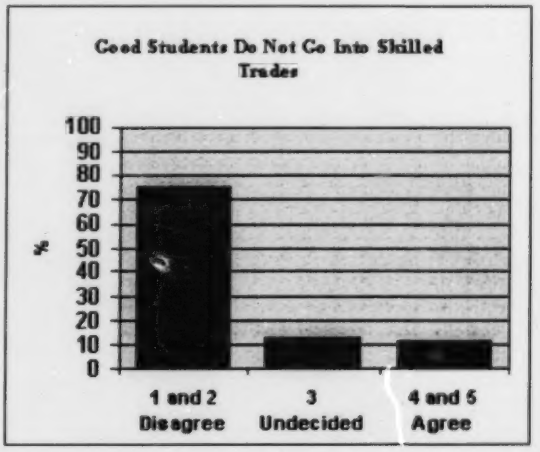
29.9% of the apprentices either agreed or strongly agreed to the statement "Information on my skilled trade was available at my high school." 52.1% disagreed or strongly disagreed and 18.0% were undecided.

Chart 12



56.1% of the apprentices either agreed or strongly agreed to the statement "Skilled trade jobs require better than average education." 25.1% disagreed or strongly disagreed and 18.8% were undecided.

Chart 13



12.0% of the apprentices either agreed or strongly agreed to the statement "Good students do not go into skilled trades." 75.0% disagreed or strongly disagreed and 13.0% were undecided.

Employer and EI Program Perceptions

It appears apprentice training was supported by employers and apprentices had relatively easy access to supervising journeypersons (***Table 13***).

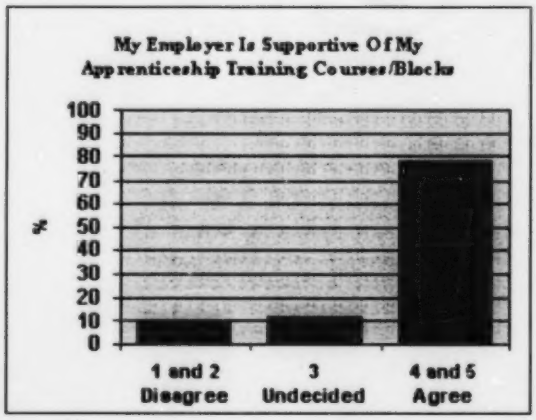
Table 13

1 = Strongly Disagree
3 = Undecided
5 = Strongly Agree

Employer and EI Program Perceptions

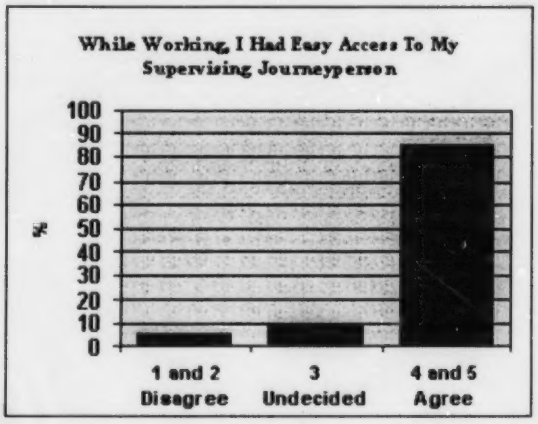
Statements	**1 (%)**	**2 (%)**	**3 (%)**	**4 (%)**	**5 (%)**
My employer is supportive of my apprenticeship training courses / blocks	3.3	6.3	**12.6**	55.1	22.6
While working, I had easy access to my supervising journeyperson	1.7	4.0	**9.2**	59.4	25.7
I was able to access EI allowances during my training period(s)	4.7	4.7	**9.4**	72.8	8.4
Getting an EI allowance was a relatively easy process	17.2	16.8	**16.8**	44.8	4.4

Chart 14



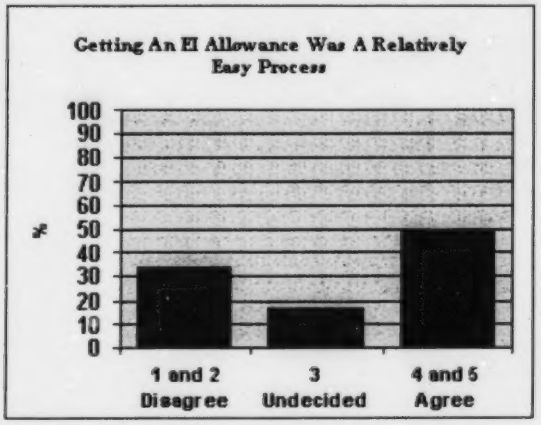
77.7% of the apprentices either agreed or strongly agreed to the statement "My employer is supportive of my Apprenticeship Training." 9.7% disagreed or strongly disagreed and 12.6% were undecided.

Chart 15



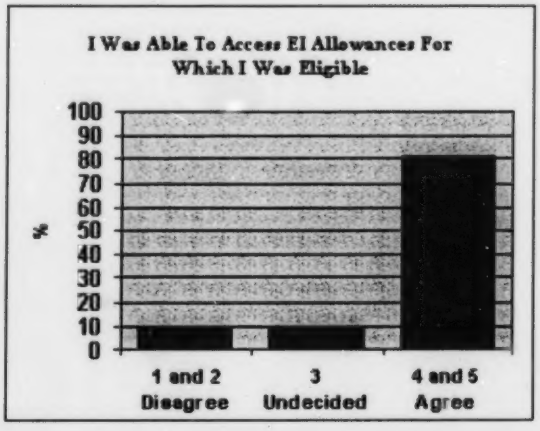
85.1% of the apprentices either agreed or strongly agreed to the statement "While working, I had easy accesss to my supervising journeyperson." 5.7% disagreed or strongly disagreed and 9.2% were undecided.

Chart 16



49.2% of the apprentices either agreed or strongly agreed to the statement "Getting an EI allowance was a relatively easy process." 34.0% disagreed or strongly disagreed and 16.8% were undecided.

Chart 17



81.2% of the apprentices either agreed or strongly agreed to the statement "I was able to access EI allowances for which I was eligible." 9.4% disagreed or strongly disagreed and 9.4% were undecided.

Encouragement Perceptions

When asked to respond to the statement " I would advise young people today to become apprentices", 20.9% strongly agreed and close to fifty percent (49.8%) agreed (***Table 14***).

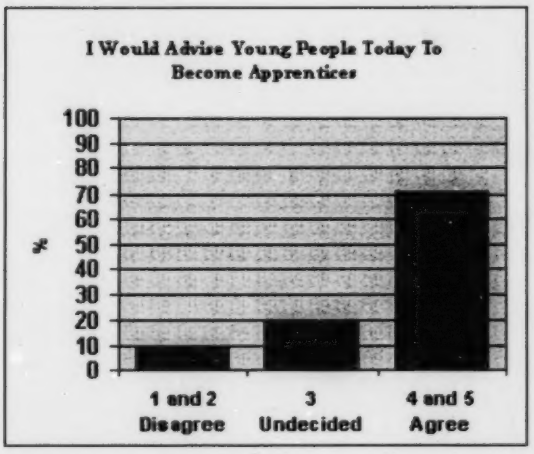
Table 14

1 = Strongly Disagree
3 = Undecided
5 = Strongly Agree

Encouragement Perceptions

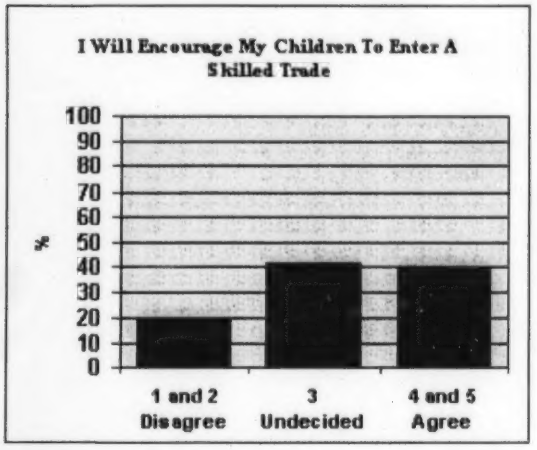
Statements	**1 (%)**	**2 (%)**	**3 (%)**	**4 (%)**	**5 (%)**
I would advise young people today to become apprentices	3.0	5.0	**21.3**	49.8	20.9
I will encourage my children to enter a skilled trade	5.0	13.8	**41.3**	30.3	9.6

Chart 18



70.7% of the apprentices either agreed or strongly agreed to the statement "I would advise young people today to become apprentices." 8.0% disagreed or strongly disagreed and 21.3% were undecided.

Chart 19



39.9% of the apprentices either agreed or strongly agreed to the statement "I will encourage my children to enter a skilled trade." 23.8% disagreed or strongly disagreed and 41.3% were undecided.

Conclusion

Results from the survey have provided the Board with a basic understanding of how apprentices perceive their training, work experience and the administration of the Apprenticeship Program. Probably the most compelling, yet obvious, interpretation of the data is the link between the positive perceptions of skilled trades and the minimal encouragement apprentices would give their own children to enter a skilled trade. Even with a relatively positive outlook on their trades, apprentices are more likely to encourage other people's children to enter a trade than their own.

With the perception of being well paid, considering trades interesting and understanding the importance of skilled trades people, one would think more high school graduates would be seeking apprenticeship as a desired career path. The reality is that students are not exposed sufficiently to the opportunities and information on the trades and therefore, are unable to make knowledgeable post secondary plans. Given the 95% to 5% male/female survey ratio, the data reaffirms the need encourage females to consider apprenticeship as a viable career path.

The Youth Decision Survey provided some insight to the challenges facing Apprenticeship and the Apprentice Survey has provided further insight. The next step is to use the data gathered for the purpose of engaging stakeholders in discussions leading to actions designed to move Apprenticeship forward.